



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/926,191      | 01/28/2002  | Arno Hohmann         | HOHM3001/JEK        | 4523             |

23364 7590 05/06/2003

BACON & THOMAS, PLLC  
625 SLATERS LANE  
FOURTH FLOOR  
ALEXANDRIA, VA 22314

|          |
|----------|
| EXAMINER |
|----------|

PAIK, STEVE S.

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2876

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicati n N .

09/926,191

Applicant(s)

HOHMANN ET AL.

Examiner

Steven S. Paik

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2876

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. The abstract of the disclosure is objected to because it contains more than a single paragraph. Correction is required. See MPEP § 608.01(b).
3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. Applicant(s) are reminded to include the following in the next communication with respect to the header(s) within the specification, as following:

a) -- **Background of the Invention** --: The specification should set forth the Background of the Invention in two parts: -- **Field of the Invention** -- and -- **Description of the Related Art** --.

b)\_\_\_\_ -- **Brief Summary of the Invention** --.

c)\_\_\_\_ -- **Brief Description of the Several Views of the Drawing(s)** --.

d)\_\_\_\_ -- **Detailed Description of the Invention** --.

Appropriate correction is required.

Art Unit: 2876

5. The amended sheet, page 2, of the Specification has ended with an incomplete disclosure. It appears an additional page is missing. Appropriate correction is required.

***Drawings***

6. The drawings are objected to because the applicant has not provided an appropriate figure number. The application is filed with a single figure. Although there is only one figure, it is respectfully suggested to label it as -- Figure 1 --. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Objections***

7. Claim 1 is objected to because of the following informalities: Each claim should follow by consecutive sequential numbers starting 1. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Minematsu et al. (US 4,864,109) in view of Dreifus (US 4,575,621).

Re claim 1, Minematsu et al. disclose a data carrier (a card shaped electronic bankbook 73) comprising a solar cell (9 in Fig. 1), in particular a smart card (73), comprising a carrier (col. 5, ll. 31-35) with at least an electronic circuit (CPU 1, program memory 2, data memory 3 and

Art Unit: 2876

4), a battery (8) and a display (5). The data carrier (73) further comprises a solar cell (9), which is electrically connected in series with the battery (8). The solar cell functions as a main power source and the battery is a back-up power source (col. 5, ll. 17-23).

Although Minematsu discloses all the physical elements of the claimed invention, he does not explicitly disclose relationship between the level of threshold voltage of the display (5) and the voltage level of the battery (8) for the purpose of detecting the usability or probability of use of the display.

Dreifus discloses a data carrier (2) comprises an electronic circuit, a display, a battery, and photocells. As will be appreciated by a person having ordinary skill in the art, the photocells are powered by a light source (32) and provide electrical power to the electronic circuit, memory and the display (16). The data carrier operates in different modes, mainly in stand-alone mode and operating mode. An interrupt control circuit (62) detects and monitors the conditions at the various elements of the card and generates an appropriate signal according to the detection process (col. 9, ll. 37-57). The monitoring and detecting process is obviously a form of detecting usability and/or probability of use of the display. Furthermore, there is a need for lengthening the life of battery in order to use the card for a longer period of time. By detecting the levels of other elements within the data carrier such as a display and a battery and minimizing the usage of them when it is not in the operating mode, the data carrier may be used for an extended period of time.

In view of Dreifus reference, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ an interrupt control unit in addition

Art Unit: 2876

to the data carrier of Minematsu et al. due to the fact that more flexible and reliable control of the data carrier can be achieved by enabling the modes of operation in accordance with the needs of a user. Accordingly, it eliminates the unnecessary power consumption and increases the life of the battery. Furthermore, such modification of incorporating the interrupt control unit to the teachings of Minematsu et al. would have been an obvious matter of design variation, well within the ordinary skill in the art, and therefore an obvious expedient.

***Additional Remarks***

10. It has been noted by the Examiner that France Patent No. 2,725,084 reference was cited as "X" reference in the PCT/EP00/02544 dated 25 July 2000.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kawana et al. (US 4,794,236) discloses an IC card having its own internal power source, display unit and command keys.

Nara et al. discloses an IC card comprising a data memory and a CPU, a keyboard and a battery. The IC card has a function of displaying the expiration data corresponds to the capacity of battery. The function illustrates the capability of detecting and monitoring the usability of the IC card.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

Art Unit: 2876

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-6893 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.



Steven S. Paik  
Examiner  
Art Unit 2876

ssp

April 30, 2003



Customer 23364

Sheet 1 of 1

|  |  |                                    |
|--|--|------------------------------------|
| B/O Form PTO-1449<br><br>U.S. Department of Commerce<br>Patent and Trademark Office<br><br>Information Disclosure Statement by Applicant | Atty. Docket Number<br><b>HOHM3001/JEK</b> | Serial Number<br><b>09/926,191</b> |
|  | Applicant<br><b>Arno HOHMANN et al.</b>    |                                    |
|  | Filing Date<br><b>22 March 2000</b>        | Group<br><b>unassigned</b>         |

## U.S. Patent Documents

| Examiner Initial | Document Number | Date      | Patentee/Applicant | Class | Subclass | Filing Date if Appropriate |
|------------------|-----------------|-----------|--------------------|-------|----------|----------------------------|
| SSP              | 5,594,465       | Jan. 1997 | Poulachon          | —     | —        |                            |
|                  |                 |           |                    |       |          |                            |
|                  |                 |           |                    |       |          |                            |
|                  |                 |           |                    |       |          |                            |
|                  |                 |           |                    |       |          |                            |
|                  |                 |           |                    |       |          |                            |

## Foreign Patent Documents

| Examiner Initial | Document Number | Publication Date | Country/Agency | Class | Subclass | Translation |    |
|------------------|-----------------|------------------|----------------|-------|----------|-------------|----|
|                  |                 |                  |                |       |          | Yes         | No |
| SSP              | 2 725 084       | March 1996       | France         | —     | —        |             | X  |
| SSP              | 2 694 439       | Feb. 1994        | France         | —     | —        |             | X  |
|                  | 196 31 557      | Feb. 1998        | Germany        | —     | —        |             | X  |
|                  | 196 30 611      | Nov. 1997        | Germany        | —     | —        |             | X  |
|                  | 298 03 987      | June 1998        | Germany        | —     | —        |             | X  |
| SSP              | 39 06 349       | Sept. 1990       | Germany        | —     | —        |             | X  |

## Other Documents (Including Author, Title, Date, Pertinent Pages, Place of Publication, Etc.)

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

|                                |                                   |
|--------------------------------|-----------------------------------|
| Examiner<br><i>Steven Pank</i> | Date Considered<br><i>4-22-03</i> |
|--------------------------------|-----------------------------------|

EXAMINER: Initial if citation is considered, whether or not citation is in conformance with MPEP 609; Draw a line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.